



COUNTY OF SAN DIEGO
Great Government Through the General Management System – Quality, Timeliness, Value
DEPARTMENT OF HUMAN RESOURCES

CLASS SPECIFICATION

CLASSIFIED

SENIOR AIR POLLUTION CHEMIST

Class No. 003868

■ CLASSIFICATION PURPOSE

To supervise Air Pollution Chemists and paraprofessional technical staff performing air pollution chemistry laboratory and field-work; to perform highly specialized chemical testing and analysis of air quality samples; and to perform related work as required.

■ DISTINGUISHING CHARACTERISTICS

This is the supervisory level in the Air Pollution Chemist class series allocated to the Air Pollution Control District (APCD). A Senior Air Pollution Chemist reports to the Chief, Monitoring and Technical Services. Under general supervision, incumbents are responsible for highly specialized chemical testing and analysis in addition to providing first-line supervision over a section of Air Pollution Chemists. This class differs from the next lower level, Associate Air Pollution Chemist, in that the latter is the journey level class with no direct supervisory responsibilities.

■ FUNCTIONS

The examples of functions listed in the class specification(s) are representative but not necessarily exhaustive or descriptive of any one position in the class(es). Management is not precluded from assigning other related functions not listed herein if such functions are a logical assignment for the position.

Essential Functions:

1. Plans, directs, coordinates, assigns, schedules, trains, and evaluates the work of subordinate Air Pollution Chemists and other technical staff within a section.
2. Serves as project leader over highly technical air pollution chemistry areas.
3. Directs and conducts specialized and exacting chemical testing and analysis of air sample pollutants and toxins.
4. Designs and establishes new or revised chemical testing procedures and methods.
5. Reviews and approves emission test methods in compliance with District standards.
6. Directs quality assurance programs, and updates and establishes procedures.
7. Reviews and evaluates sample data for compliance with District regulations and procedures.
8. Prepares technical and analytical reports.
9. Prepares grant proposals and administers the implementation of grant programs.
10. Prepares section budget requests, researches new chemistry laboratory equipment and technologies, and orders supplies, fixed assets, and equipment.
11. Interacts with Federal, State, and local agencies and serves on intergovernmental technical committees.
12. Provides responsive, high quality service to County employees, representatives of outside agencies and members of the public by providing accurate, complete and up-to-date information, in a courteous, efficient and timely manner.

■ KNOWLEDGE, SKILLS AND ABILITIES

Knowledge of:

- Supervision and training principles, methods, and techniques.
- Quantitative and qualitative chemical analysis procedures and the theories and principles involved in air contaminant testing and analysis.

- Operation and use of air pollution instrumentation/equipment in laboratory and field examinations and tests relative to air pollution determination.
- Applicable Federal and State laws; and regulations related to air pollution control.
- Principles of algebra, calculus, and statistics.
- The General Management System in principle and in practice.
- County customer service objectives and strategies.

Skills and Abilities to:

- Plan, direct, coordinate, assign, schedule, train, and evaluate the work of subordinate Air Pollution Chemist and other staff.
- Direct air pollution chemistry and quality assurance programs.
- Utilize a variety of analytical methods and instrumentation techniques to analyze air contaminant samples.
- Design and establish air pollution chemical field-testing and analysis procedures and methods.
- Diagnose and solve technical problems in air pollution chemistry.
- Operate, maintain, and calibrate laboratory and field instruments.
- Prepare clear and concise technical reports.
- Prepare budgets requests and research and order chemistry laboratory and testing materials, supplies, and equipment.
- Perform scientific calculations on a computer.
- Effectively communicate in oral and written form.
- Treat County employees, representatives of outside agencies and members of the public with courtesy and respect.
- Exercise appropriate judgment in answering questions and releasing information; analyze and project consequences of decisions and/or recommendations.

■ EDUCATION/EXPERIENCE

Education, training, and/or experience that demonstrate possession of the knowledge, skills and abilities listed above. Examples of qualifying education/experience are: a bachelor's degree from an accredited college or university in chemistry, chemical engineering, or a related field that meets the undergraduate education standards of the American Chemical Society, AND

1. Four (4) years of experience performing professional air pollution chemistry work. Previous experience in performing professional work in testing hazardous substances may substitute for one (1) year of the experience requirement stated above, OR
2. Two (2) years as an Associate Air Pollution Chemists for the Air Pollution Control District in the County of San Diego.

Note: Possession of a master's or other advanced degree as stated above may substitute for one (1) year of the above experience requirement. Previous experience in providing full supervision over subordinate Air Pollution Chemists is highly desirable.

■ ESSENTIAL PHYSICAL CHARACTERISTICS

The physical characteristics described here are representative of those that must be met by an employee to successfully perform the essential functions of the classification(s). Reasonable accommodation may be made to enable an individual with qualified disabilities to perform the essential functions of a job, on a case-by-case basis.

Continuous upward and downward flexion of the neck. Frequent: sitting, repetitive use of hands to operate computers, printers and copiers, walking, standing, simple and power grasping, reaching above and below shoulder level, pushing and pulling, equipment. Occasional: bending and twisting of neck, bending and twisting of waist, squatting, climbing, kneeling, and crawling. Ability to climb ladders and work at heights of 250+ feet. Must have acceptable visual acuity for color. Incumbents use physical strength and agility on a continual basis, including lifting objects frequently weighing up to 50 pounds, and occasionally weighing up to 70 pounds. Incumbents may be required to climb ladders and conduct work at elevated heights.

■ SPECIAL NOTES, LICENSES, OR REQUIREMENTS

License

A valid California class C driver's license, which must be maintained throughout employment in this class, is required at time of appointment, or the ability to arrange necessary and timely transportation for field travel. Employees in this class may be required to use their own vehicle.

Certification/Registration

None Required.

Working Conditions

Office environment; exposure to computer screens. Incumbents in this class may be exposed to noxious fumes, dirt, excessive heat, and noise; may be required to work at heights over 250 feet above ground; and, may be required to work early morning hours.

Background Investigation

Must have a reputation for honesty and trustworthiness. Misdemeanor and/or felony convictions may be disqualifying depending on type, number, severity, and recency. Prior to appointment, candidates will be subject to a background investigation.

Probationary Period

Incumbents appointed to permanent positions in this class shall serve a probationary period of 12 months (Civil Service Rule 4.2.5).

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Senior Air Pollution Chemist (Class No. 003868)

Union Code: MM

Variable Entry: Y